|          | Index of Claims App                                     |          |          |          |              |          |           |           |                        |                |            |          |            | plic     | cat            | 101        |                    | $\mathcal{T}'$ | Applicant(s) |     |              |              |              |     |     |                         |              |   |            |                              |         |             |              |          |              |         |          |          |          |
|----------|---|----------|----------|----------|--------------|----------|-----------|-----------|------------------------|----------------|------------|----------|------------|----------|----------------|------------|--------------------|----------------|--------------|-----|--------------|--------------|--------------|-----|-----|-------------------------|--------------|---|------------|------------------------------|---------|-------------|--------------|----------|--------------|---------|----------|----------|----------|
|          |   |          |          |          |              |          |           |           |                        |                |            |          |            |          | 40             | 10/764,707 |                    |                |              |     |              |              |              |     |     | ],                      | AA/[         | • • •                                   | ۱۵۱        | 49                           | E-      | ٠ ۵         | . 1          |          |              |         |          |          |          |
|          |   |          |          |          |              |          |           |           |                        |                |            |          |            |          |                | ami        |                    |                | <u>'</u>     |     | _            |              |              | _   |     | WILLIAMS ET AL Art Unit |              |   |            |                              |         |             |              |          |              |         |          |          |          |
|          |   |          |          |          |              |          |           |           |                        |                |            |          |            |          |                |            |                    |                |              |     |              |              |              |     |     |                         |              |   |            |                              |         |             |              |          |              |         |          |          |          |
|          | I CESTRA CATALLETTE COTT CITAL STATE COTT (SET ) 1857 W |          |          |          |              |          |           |           |                        |                |            |          |            |          | Mic            | <u>sha</u> | ıel                | <u>P</u> .     | <u>. F</u>   | erç | gus          | 1            |              |     | 上   | 3679                    |              |   |            |                              |         |             |              |          |              |         |          |          |          |
|          |   |          | _        | _        |              |          |           | _         | 1                      |                | _          | _        | _          | _        | _              | <u> </u>   | _                  |                |              | _   | ٦            | Г            | _            |     |     |                         |              |   | 1          | _                            |         |             |              |          |              |         |          |          | -        |
|          |   |          | 1        | F        | Rej          | jec      | ste       | id        | l                      |                | _          | .        | (T         | ſhr      | OU             | ance       | nur                | me             | ral          | )   |              | N            |              | Nc  | on- | -Ele                    | ct           | ted                                     | 1          | A                            |         |             | Αр           | pe       | al           |         |          |          |          |
|          |   |          | 1        | +        | _            |          |           | 4         | l                      |                | F          | +        |            | _        | <u> </u>       | inu        |                    | <u> </u>       | —            | _   | 4            | 1            | 4            | _   | _   | _                       | _            | لــــــــــــــــــــــــــــــــــــــ | ł          | 1                            | 4       | <del></del> |              |          |              |         | 4        |          |          |
|          | = Allowed + R   |          |          |          |              |          |           |           |                        |                |            |          |            |          | Rŧ             | Restricted |                    |                |              |     |              | ļı           | ı            | Inf | ter | rfere                   | en           | ice                                     |            | c                            | ر       | C           | )bj          | ect      | ed           | l       |          |          |          |
|          |   |          | L        | 上        |              |          |           | لــ       | ı                      |                | L          | 上        | —          | —        | _              | —          | _                  | —              |              | —   | ل            | L            | 丄            | _   |     |                         |              |   | i          | L                            | 丄       | _           |              |          |              |         | J        |          |          |
| [        | Cl  | aim      |          | _        |              | _        | 0         | ate       | _                      | _              | _          | _        | ] [        |          | Cli            | aim        | Γ                  | _              | _            | _   | Dat          | ite          |              |     | _   | ]                       | ſ            | CI                                      | laim       | Γ                            | _       | _           | _            | Dal      | le_          | _       | _        |          | 7        |
| Ì        | _   | ē        | Se Co    | ١        |              |          |           |           |                        |                | <b>)</b> : |          | _          | ब्र      | , ]            | T          | T                  | 1              | T            | 1   | 1            | 7            | 7            |     | Ī   |                         | T            | T                                       | T          | T                            | T       | T           | T            | T        | Τ            | Γ       | 1        |          |          |
|          | Final   | Original |          | Till the | $\mathbb{H}$ | ST       |           |           | (-)                    |                |            |          |            | 1;       | Final          | Original   |                    |                |              |     |              |              | Ì            |     |     | ľ                       |              | Final                                   | Original   |                              |         | 1           |              |          |              |         |          |          |          |
| ]        | -   | <u> </u> |          | P        | ¥            | 歪        | 4         |           |                        | L              | L          | L        | ]:         | L        | _'             |            |                    |                | $\perp$      | 1   |              | L            | 1            | 1   | 1   | ]:                      |              |   |            |                              |         |             |              |          |              |         |          |          |          |
| }        |   | 1        | V        | 1        | Ţ.           | 4        | ၞ         | 4         |                        | F              | L          | Ţ        | }.·        | £        |                | 51<br>52   |                    | Ţ              | Ŧ            | Ŧ   | I            | Ŧ            | Ŧ            | 7   | 7   | <b>]</b> ;              |              |   | 101        |                              | I       | T           | I            | I        | I            | I       | 工        | 口        | <u>j</u> |
| }        | —   | 3        | H        | ┰        | 4            | 1        | 4         | +         | $\vdash$               | $\vdash$       | +          | +        | -          | $\vdash$ | _              | 52<br>53   |                    | +              | +            | +   | +            | 十            | +            | +   | +   |                         | ŀ            |   | 102        | +                            | +       | +           | ╀            | ╀        | ╀            | +       | ╀        | ┼-       | ┦.       |
| Į        | =   | 4        | I        | Ž        | ~            | 7        | コ         | J         |                        |                | 上          | 上        | <b>†</b> ∵ |          |                | 54         | П                  | T              | 士            | T   | t            | t            | 1            | 1   | 1   | 丁.                      | ļ            |   | 104        |                              | 士       | 七           | 七            | t        | 七            | 士       | 七        | +        | 1        |
| }        |   | 5        | 4        | Ļ        | 亅            | 7        | 4         | 4         | لَ                     | F              | $\perp$    | Ļ        | }          | F        | لـــ           | 55         | 1                  | Ţ              | Ŧ            | 1   | $\downarrow$ | 1            | 7            | 7   | 7   | $\exists$               | 1            |   | 105        |                              | I       | I           | L            | L        | L            | I       | I        | 二        | ]        |
| }        |   | 7        | #        | ₽        | 1            | 4        | 4         | +         | H                      | $\vdash$       | +          | +        | +          | 1        | <b>—</b>       | 56<br>57   |                    | +              | 十            | +   | +            | +            | 十            | +   | +   | 4                       | -            | <b>_</b> -                              | 106        |                              | +       | ╀           | ╀            | +        | ╀            | +       | +        | +        | 4        |
|          |   | 8        | 世        |          | 1/1          |          | 1         | J         |                        |                | 上          | 上        | <u> </u>   |          | コ              | 58         | П                  | 士              | t            | t   | 士            | 士            | +            | 士   | +   | 寸"                      | 1            |   | 108        |                              | 士       | 七           | t            | 十        | 七            | 士       | +        | 一        | 1        |
| -        |   | 9        | V        | 1        | 4            | 4        | 7         | 7         |                        | L              | L          | Ţ        | ]:         |          |                | 59         |                    | Ţ              | I            | 1   | 1            | Ţ            | 1            | 1   | 7   | ٦:                      | 1            |   | 109        | $\perp$                      | I       | I           | 上            | 工        | 上            | 工       | 上        | 上        | j        |
| }        |   | 10       | $\vdash$ | $\vdash$ | +            | 十        | +         | +         | $\dashv$               | $\vdash$       | $\vdash$   | ╀        | ╬          | +        |                | 60<br>61   |                    | +              | +            | +   | +            | +            | +            | +   | +   | -1                      | : }          |   | 110        |                              | +       | ₽           | 1            | 1        | 1            | 1       | 1        | $\vdash$ |          |
| Į        |   | 12       | 七        | 七        | t            | t        | +         | 寸         | 一                      |                | +          | +        | 1.         | 上        | -              | 62         | 1                  | +              | +            | +   | +            | +            | +            | +   | +   | $\dashv_{i}$            | <u>.</u> : - |   | 1112       |                              | +       | ╁           | +            | +        | +            | +       | +-       | ╁        | ł        |
| L        |   | 13       | 上        | 上        | D            | *        | 7         | 7         |                        |                |            | 上        | 12         | E        |                | 63         |                    | 上              | 上            | #   | #            | 士            | #            | #   | #   | ];                      |              |   | 113        |                              | 士       | 世           | 亡            | t        | t            | 七       | t        | t        | 1        |
| H        | لــــــ   | 14<br>15 | 1        | 1        | +            | +        | +         | +         | H                      | Ĺ              | 1          | 1        | ₩.         | L        | _              | 64<br>65   | +                  | +              | 1            | 1   | 1            | 1            | 7            | 7   | 7   | ]                       | 4            |   | 114        |                              | ļ       | L           | L            | L        | L            | 工       | L        | 上        | ]        |
| t        | <del>-</del>  | 16       | +        | +        | +            | +        | +         | +         | 1                      | $\vdash$       | $\vdash$   | +        | <b>:</b>   | $\vdash$ | -              | 66         | ī                  | +              | +            | +   | +            | 十            | +            | +   | +   | 1                       | :}           | .—                                      | 115<br>116 |                              | +       | +           | +            | +        | +            | +       | +        | +-       | 1        |
| [        |   | 17       | 上        | 上        | T            | #        | #         | 7         |                        |                |            | 上        | ļ;·        |          | J              | 67         |                    | 士              | 士            | 士   | 士            | 士            | 士            | 士   | 1   | 1                       | 1            |   | 117        | Π                            | t       | t           | 七            | 七        | 七            | 十_      | 七        | t        | 1        |
| }        | لـــــ  | 18<br>19 | 1        | 1        | 1            | 十        | $\dot{+}$ | 4         | $\tilde{oldsymbol{+}}$ | $\hat{\vdash}$ | $\Box$     | Ł        | ];;        | F        | $\hat{\dashv}$ | 68<br>69   |                    | 1              | Ŧ            | 1   | ļ            | Ŧ            | 7            | 7   | 7   | $\exists$ :             |              | $\Box$                                  | 118        | Т                            | 丰       | 工           | L            |          | L            | 工       | L        | 上        | j        |
| Ė        | -   | 20       | $\vdash$ | +        | +            | +        | +         | +         | 7                      | ۳              | +          | +        | 1::        | $\vdash$ | -              | 70         | 1                  | +              | +            | +   | +            | 十            | +            | +   | +   | 4:                      | +            | .—                                      | 119<br>120 |                              | +       | +           | +            | +        | +            | +       | 1        | $\vdash$ | 1        |
| Ţ        |   | 21       | 亡        | t        | t            | #        | #         | 1         | J                      |                |            |          |            |          | J              | 71         | Т                  | t              | t            | t   | 七            | t            | t            | 士   | +   | 1                       | 1            | 7                                       | 121        | Т                            | +       | +           | 十            | +        | 十            | +       | ╁        | 一        | 1        |
| -        | $\supseteq$   | 22       | L        | L        | L            | 1        | 7         | $\exists$ | $\Box$                 | $\Box$         | Ľ          | L        | ابدا       | L        | $\dashv$       | 72         |                    | 1              | 1            | 1   | 1            | 1            | 1            | 1   | 1   | Д;;                     | 1            |   | 122        |                              | 土       | 上           | 上            | 上        | L            | 上       | 亡        | 亡        | 1        |
| F        |   | 23<br>24 | $\vdash$ | +        | +            | 十        | +         | 十         | -                      | $\vdash$       | ₩          | ₽        | *          | +        | -              | 73<br>74   | +                  | +              | +            | +   | +            | +            | +            | +   | +   | $\dashv$                | +            | $\rightarrow$                           | 123<br>124 | +                            | 1       | $\vdash$    | <del> </del> | L        | $\vdash$     | $\perp$ | -        | _        | ı        |
|          |   | 25       |          | t        | t            | t        | 士         | 寸         | 丁                      | 己              |            |          |            | 七        | 寸              | 75         |                    | t              | 七            | 七   | 七            | t            | 十            | +   | +   | 1                       | +            |   | 125        | +                            | +       | 十           | $\vdash$     | $\vdash$ | $\vdash$     | ╁       | +        | +        | ł        |
| }        | $\square$   | 26       | L        | L        | Ţ            | Ŧ        | 7         | 7         | $\Box$                 | $\Box$         | $\Box$     | L        | <b>]</b> ; |          | $\Box$         | 76         |                    | I              | 丰            | 丰   | 工            | 丰            | 丰            | #   | #   | ]∷                      | T            |   | 126        | L                            | 上       | 上           | 上            | 匚        | 亡            | 士       | 亡        | 匚        |          |
| H        |   | 27<br>28 | -        | ⊬        | +            | +        | +         | +         | -                      | Ш              | $\vdash$   | -        |            | -        | -              | 77<br>78   |                    | +              | +            | +   | +            | +            | +            | +   | +   | <b>-</b>  ;,            | 1            |   | 127        |                              | $\perp$ | L           | Ļ            | L        | L            | Į_      | L        | L        | 1        |
|          |   | 29       | 世        |          | 七            | t        | T         | 士         | 寸                      | $\Box$         |            |          | <b>!</b> : |          | 7              | 79         |                    | t              | t            | 七   | +            | +            | +            | 十   | +   | ٦.                      | H            |   | 128<br>129 |                              | 十       | $\vdash$    | $\vdash$     | ⊢        | ╁            | +       | $\vdash$ | $\vdash$ | İ        |
| ·  -     |   | 30       |          | 匚        | 上            | I        | 7         | 7         | $\Box$                 |                |            |          | k. '       | 二        | 口              | 80         |                    | 上              | 上            | 上   | 上            | 上            | 丰            | 丰   | 丰   | コ                       | ļ            |   | 130        | 上                            | 二       | 上           | 亡            | 上        | 上            | 上       | t        |          | Í        |
| H        | $\dashv$  | 31<br>32 | -        | $\vdash$ | $\vdash$     | +        | +         | +         | +                      | لــا           | $\vdash$   | -        |            | -        | +              | 81<br>82   |                    | +              | ╀            | +   | +            | Ļ            | $\downarrow$ | 7   | +   | 4                       | ŀ            |   | 131        | F                            | Τ.      | L           | L            |          | L            | L       | L        |          | İ        |
| t        | J   | 33       | H        | $\vdash$ | 十            | 七        | +         | +         | 寸                      | ٢              | $\vdash$   | $\vdash$ | '.'        | -        |                | 83         |                    | +              | +            | +   | +            | 十            | +            | +   | +   | +                       | H            |   | 132<br>133 | $\vdash$                     | +       | $\vdash$    | ╀╌           | ├        | ├-           | ╀       | ╀        | ₩        | l        |
| Ĺ        | $\Box$  | 34       |          |          | 口            | I        | 丰         | 工         | コ                      |                |            |          | 13         | 上        |                | 84         |                    |                | 上            | 上   | 上            | 上            | 士            | 士   | 士   | _::                     | t            |   | 134        |                              | 世       |             | 一            | <u> </u> | 上            | 七       | 七        | H        | ĺ        |
| ⊦        |   | 35<br>36 | $\vdash$ | -        | ╀            | +        | +         | +         | +                      | , ,            | Ή          | $\vdash$ | ]          | L        |                | 85         |                    | <u></u>        | Į_           | Ţ   | Ţ            | T            | Ţ            | 1   | 1   | <b>]</b> ;              | Г            |   | 135        |                              |         |             |              | 匚        | 匚            | L       | 口        |          |          |
| b        |   | 36       | Н        | $\vdash$ | $\vdash$     | 十        | +         | 十         | +                      | -              | H          | ۳        | 1          | $\vdash$ |                | 86<br>87   |                    | +              | $\vdash$     | 十   | +            | $\vdash$     | +            | +   | +   | -                       | -            |   | 136<br>137 | $\vdash$                     | ╀       | $\vdash$    | H            | $\vdash$ | <del> </del> | ╀       | ₽        | Н        | l        |
| F        | $\Box$  | 38       |          |          | 口            | 士        | #         | 1         | $\downarrow$           | J              |            |          | []         | 乚        |                | 88         |                    |                | t            | 七   | t            | t            | 七            | 七   | 十   | 7                       | t            |   | 138        |                              | ۲       | H           | H            |          | $\vdash$     | ╁       | +        | H        | ĺ        |
| F        |   | 39       | Н        | $\Box$   | L            | Ţ        | 7         | 7         | 7                      |                | 口          |          | 1          |          |                | 89         |                    | T,             | L            | 二   |              | T            | 丰            | 1   | I   | コ                       | F            |   | 139        |                              | 口       |             |              |          | 匚            | 匚       |          |          | İ        |
| <b>-</b> | -   | 40<br>41 | Н        | Н        | $\vdash$     | +        | +         | +         | +                      | -              | Н          | $\vdash$ |            | $\vdash$ |                | 90<br>91   | ₽                  | +              | $\vdash$     | ╀   | -            | ╀            | +            | +   | +   | 4                       | -            |   | 140<br>141 | $\vdash$                     | ₽       |             | $\square$    |          |              | L       |          |          | l        |
|          | コ   | 42       |          |          |              | t        | 士         | 1         | 士                      | J              | 口          |          | 11         |          |                | 92         |                    | ۲              | H            | t   | +            | <del> </del> | +            | +   | +   | 4                       | 1            |   | 142        | $\vdash$                     | ₩       | $\vdash$    | H            | H        | $\vdash$     | ╁       | H        | H        |          |
| -        |   | 43       | $\Box$   |          | 匚            | T        | I         | 7         | 7                      | 口              | 口          |          |            |          |                | 93         |                    | $\Box$         | 口            | 上   | 上            | 上            | 上            | 丰   | #   | コ                       | F            |   | 143        | $\Box$                       | $\Box$  |             |              |          |              |         |          |          | İ        |
| ⊢        |   | 44<br>45 |          | -        | $\vdash$     | ╁        | +         | +         | +                      | +              | 7          |          | 17         | -        |                | 94<br>95   | 1                  | $\vdash$       | ⊬'           | +   | ₽            | ╀            | +            | +   | +   | Ì                       | F            |   | 144        | Ĥ                            | $\Box$  | Н           | Н            | Н        | H            | $\Box$  |          | $\Box$   | 1        |
|          |   | 46       |          | J        |              | t        | t         | 士         | 1                      | 寸              | 寸          | J        | 1          |          |                | 96         | H                  |                | 1            | 尸   | ۲            | H            | t            | +   | +   | 1                       | H            |   | 146        |                              | H       | H           | Н            | H        | Н            | Н       | Н        | H        | I        |
| <b></b>  |   | 47       | $\Box$   | 二        |              | L        | Ţ         | 1         | 7                      | コ              | 口          | コ        | $\Gamma $  |          | I              | 97         |                    |                |              |     |              |              | 上            | 上   | 上   | 1                       |              |   | 147        |                              |         |             |              |          |              |         |          | 口        | 1        |
| ⊢        | _   | 48<br>49 | +        | $\dashv$ | Ш            | ╀        | +         | +         | +                      | +              | 4          | 4        | 1          | $\vdash$ |                | 98<br>99   | $\boldsymbol{\mu}$ | $\ddot{pert}$  | $\vdash$     | -   | لب           | -            | Ł            | +   | Ŧ   | 7                       | F            |   | 148        | $m{m{m{m{m{m{m{m{m{m{m{m{m{$ | Н       | $\dashv$    | $\square$    | $\Box$   | Ч            | Ц       |          | $\Box$   | i        |
| <b>-</b> |   | 50       | +        | 7        | Н            | $\vdash$ | 十         | +         | +                      | +              | +          | 7        | 1          |          |                | 100        | $\mapsto$          | $\vdash$       | ۲            | -   | H            |              | $\vdash$     | +   | +   | 4                       | $\vdash$     |   | 149        | لسم                          | H       | -           | -            | -        | H            | Н       | Н        | H        | i        |